

## **SECTION 611 -- SEALING TRANSVERSE AND LONGITUDINAL CRACKS**

### **611.01 -- Description**

This work shall consist of preparation and sealing of transverse cracks and longitudinal cracks, which are in the portland cement concrete roadway.

### **611.02 -- Material Requirements**

The transverse and longitudinal cracks shall be sealed with a hot-poured type joint sealing filler which conforms to the requirements of Section 1014.

### **611.03 -- Construction Methods**

#### **1. Preparation of Transverse and Longitudinal Cracks:**

a. Transverse and longitudinal cracks from 1/4 inch to 1/2 inch (6 mm to 12.5 mm) in width shall be prepared with a crack reservoir of a nominal 3/4 inch (20 mm) in width at the surface of the pavement and to a depth of at least 3/4 inch (20 mm). The crack reservoir shall be prepared by removing old crack sealing filler, if previously filled. The crack reservoir may be formed with routers, diamond blade sawing or other procedures which will provide the appropriate dimensions for the well. After the crack has been prepared to the proper width and depth, the crack shall be flushed with water to remove any slurry that has been created. After the cracks have been dried, they shall be given a sandblast cleaning to remove loose crack sealing filler or other foreign material prior to applying the crack sealing filler.

b. Transverse and longitudinal cracks 1/2 inch (12.5 mm) and over in width shall have the crack interfaces prepared by removing old crack sealing filler, if previously sealed. All loose crack sealing filler or other foreign material shall be removed by sandblasting to a depth of at least 1.5 inches (38.1 mm). Backer rods may be used in the transverse cracks and longitudinal cracks at the option of the Contractor. The backer rod shall be of a size which will fit tightly in the crack and of a material which will not melt when subjected to hot poured type joint sealing filler. The backer rod shall be of such diameter to be seated properly that will allow for a depth of approximately 1.5 inches (38.1 mm) of crack sealing filler.

c. The location of the transverse and longitudinal cracks to be sealed will be designated by the Engineer.

#### **2. Sealing Transverse and Longitudinal Cracks:**

a. The crack sealing filler shall be melted uniformly and with constant stirring in an asphalt kettle of such design that direct flames are not applied to the immediate surfaces of the kettle which are in contact with the joint sealing filler.

b. The material shall be furnished or prepared in pieces of such size and shape that the material can be melted readily to the proper pouring consistency.

c. The Contractor shall obtain from the supplier or from the manufacturer and furnish to the project manager the manufacturer's recommendations for mixing application and temperature restrictions. These recommendations shall be strictly followed. In no case shall the temperature exceed the maximum recommended by the manufacturer.

d. When proper pouring consistency is attained, the joints shall be filled to 1/4"-1/8" (6-3 mm) below the pavement surface through the use of a pressure type applicator approved by the Engineer, and equipped with a nozzle which will fit into the joints.

e. Material spilled on surfaces of the pavement adjacent to the joint shall be cleaned away by the Contractor at no additional cost to the Department.

**611.04 -- Method of Measurement**

Sealing transverse working cracks and longitudinal cracks will be measured for payment by the linear foot (0.3 m) of transverse working cracks and longitudinal cracks sealed, measured to the nearest foot (0.3 m) of sealed cracks, complete, in place and accepted by the Engineer.

**611.05 -- Basis of Payment**

1. Pay Item	Pay Unit
Sealing Cracks	Linear Feet (LF) [Meter (m)]
2. Payment is full compensation for all work prescribed in this Section and all sealant manufacturer's requirements.	